



# United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/707,783	01/12/2004	Kenneth Michael Davis	1782	
75	90 01/12/2005		EXAMINER	
Kenneth Michael Davis			BENTON, JASON	
71003 16th Ave South Haven, N			ART UNIT	PAPER NUMBER
			3747	
			DATE MAILED: 01/12/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/707,783	DAVIS, KENNETH MICHAEL			
Office	Action Summary	Examiner	Art Unit			
		Jason Benton	3747			
The MAILI Period for Reply	The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply					
THE MAILING DA  - Extensions of time marter SIX (6) MONTH:  - If the period for reply - If NO period for reply - Failure to reply within Any reply received by	STATUTORY PERIOD FOR REPLATE OF THIS COMMUNICATION. ay be available under the provisions of 37 CFR 1.1 for from the mailing date of this communication. specified above is less than thirty (30) days, a replied is specified above, the maximum statutory period the set or extended period for reply will, by statute the Office later than three months after the mailing dijustment. See 37 CFR 1.704(b).	136(a). In no event, however, may a reply be timely within the statutory minimum of thirty (30) day will apply and will expire SIX (6) MONTHS from a cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status						
1) Responsive	e to communication(s) filed on	<b></b> ·				
2a)☐ This action	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.					
•	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in a	ccordance with the practice under l	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.			
Disposition of Clain	ns					
4)⊠ Claim(s) <u>1-</u>	4) Claim(s) 1-15 is/are pending in the application.					
4a) Of the a	4a) Of the above claim(s) is/are withdrawn from consideration.					
5)	Claim(s) is/are allowed.					
· · · · · · · · · · · · · · · · · · ·	Claim(s) <u>1-15</u> is/are rejected.					
,	is/are objected to.	an alaatian maguinamant				
8) Claim(s)	are subject to restriction and/o	or election requirement.				
<b>Application Papers</b>						
	cation is objected to by the Examine					
10)☐ The drawing(s) filed on is/are: a)☐ accepted or b)☐ objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
11) Ine oath or	declaration is objected to by the E	xaminer. Note the attached Office	ACTION OF TOME FTO-132.			
Priority under 35 U.	S.C. § 119					
a)∏ All b)□	gment is made of a claim for foreigr ] Some * c)  None of: fied copies of the priority documen		)-(d) or (f).			
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list of the certified copies not received.						
Attachment/s)						
Attachment(s)  1) Notice of References Cited (PTO-892)  4) Interview Summary (PTO-413)						
2) Notice of Draftsperson's Patent Drawing Review (PTO-948)						
3) Information Disclos Paper No(s)/Mail D	ure Statement(s) (PTO-1449 or PTO/SB/08 ate	6) Other:	-асент Аррисацоп (РТО-152)			
S. Patent and Trademark Office						

The transfer of the second of the second of the second of the

Art Unit: 3747

#### **DETAILED ACTION**

## Specification

The abstract of the disclosure is objected to because it is too long, the abstract is a short summary of the invention. It is preferred to be about 50 words in length.

Correction is required. See MPEP § 608.01(b).

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

## Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a).

"Microfiche Appendices" were accepted by the Office until March 1, 2001.)

- (e) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.
- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (i) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if

Art Unit: 3747

the required "Sequence Listing" is not submitted as an electronic document on compact disc).

#### Content of Specification

- (a) <u>Title of the Invention</u>: See 37 CFR 1.72(a) and MPEP § 606. The title of the invention should be placed at the top of the first page of the specification unless the title is provided in an application data sheet. The title of the invention should be brief but technically accurate and descriptive, preferably from two to seven words may not contain more than 500 characters.
- (b) <u>Cross-References to Related Applications</u>: See 37 CFR 1.78 and MPEP § 201.11.
- (c) <u>Statement Regarding Federally Sponsored Research and Development:</u> See MPEP § 310.
- (d) Incorporation-By-Reference Of Material Submitted On a Compact Disc:
  The specification is required to include an incorporation-by-reference of electronic documents that are to become part of the permanent United States Patent and Trademark Office records in the file of a patent application. See 37 CFR 1.52(e) and MPEP § 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text were permitted as electronic documents on compact discs beginning on September 8, 2000.

Or alternatively, Reference to a "Microfiche Appendix": See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.

- (e) <u>Background of the Invention</u>: See MPEP § 608.01(c). The specification should set forth the Background of the Invention in two parts:
  - (1) Field of the Invention: A statement of the field of art to which the invention pertains. This statement may include a paraphrasing of the applicable U.S. patent classification definitions of the subject matter of the claimed invention. This item may also be titled "Technical Field."
  - (2) <u>Description of the Related Art including information disclosed under 37 CFR 1.97 and 37 CFR 1.98</u>: A description of the related art known to the applicant and including, if applicable, references to specific related art and problems involved in the prior art which are

Line of the Maryland Maryland

Art Unit: 3747

solved by the applicant's invention. This item may also be titled "Background Art."

- (f) Brief Summary of the Invention: See MPEP § 608.01(d). A brief summary or general statement of the invention as set forth in 37 CFR 1.73. The summary is separate and distinct from the abstract and is directed toward the invention rather than the disclosure as a whole. The summary may point out the advantages of the invention or how it solves problems previously existent in the prior art (and preferably indicated in the Background of the Invention). In chemical cases it should point out in general terms the utility of the invention. If possible, the nature and gist of the invention or the inventive concept should be set forth. Objects of the invention should be treated briefly and only to the extent that they contribute to an understanding of the invention.
- (g) <u>Brief Description of the Several Views of the Drawing(s)</u>: See MPEP § 608.01(f). A reference to and brief description of the drawing(s) as set forth in 37 CFR 1.74.
- (h) Detailed Description of the Invention: See MPEP § 608.01(g). A description of the preferred embodiment(s) of the invention as required in 37 CFR 1.71. The description should be as short and specific as is necessary to describe the invention adequately and accurately. Where elements or groups of elements, compounds, and processes, which are conventional and generally widely known in the field of the invention described and their exact nature or type is not necessary for an understanding and use of the invention by a person skilled in the art, they should not be described in detail. However, where particularly complicated subject matter is involved or where the elements, compounds, or processes may not be commonly or widely known in the field, the specification should refer to another patent or readily available publication which adequately describes the subject matter.
- (i) Claim or Claims: See 37 CFR 1.75 and MPEP § 608.01(m). The claim or claims must commence on separate sheet or electronic page (37 CFR 1.52(b)(3)). Where a claim sets forth a plurality of elements or steps, each element or step of the claim should be separated by a line indentation. There may be plural indentations to further segregate subcombinations or related steps. See 37 CFR 1.75 and MPEP § 608.01(i)-(p).
- (j) Abstract of the Disclosure: See MPEP § 608.01(f). A brief narrative of the disclosure as a whole in a single paragraph of 150 words or less commencing on a separate sheet following the claims. In an international application which has entered the national stage (37 CFR 1.491(b)), the applicant need not submit an abstract commencing on a separate sheet if

Art Unit: 3747

an abstract was published with the international application under PCT Article 21. The abstract that appears on the cover page of the pamphlet published by the International Bureau (IB) of the World Intellectual Property Organization (WIPO) is the abstract that will be used by the USPTO. See MPEP § 1893.03(e).

(k) <u>Sequence Listing.</u> See 37 CFR 1.821-1.825 and MPEP §§ 2421-2431. The requirement for a sequence listing applies to all sequences disclosed in a given application, whether the sequences are claimed or not. See MPEP § 2421.02.

#### **Drawings**

New corrected drawings are required in this application because it is difficult to read the drawings as they are. Applicant is advised to employ the services of a competent patent draftsperson outside the Office, as the U.S. Patent and Trademark Office no longer prepares new drawings. The corrected drawings are required in reply to the Office action to avoid abandonment of the application. The requirement for corrected drawings will not be held in abeyance.

## Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, first paragraph, as based on a disclosure which is not enabling. Structure that is critical or essential to the practice of the invention, but not included in the claim(s) is not enabled by the disclosure. See *In re Mayhew*, 527 F.2d 1229, 188 USPQ 356 (CCPA 1976). The claims appear to be statements of desired results that contain no structural limitations on how the desired results are achieved.

Art Unit: 3747

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 1-15 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

## Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Buelna.

The patent by Buelna (5,052,349) shows a rotary valve with intake and exhaust runners for an internal combustion engine. The rotary valve allows for a less complex engine design, is adaptable to a variety of current and future engine designs, and reduces weight and internal friction and power loss without the transfer of rotating to reciprocating motion. Lower speed is required to operate and achieve a smooth engine idle. Higher revolutions per minute capability is limited only by the crankshaft, rod and piston assemblies vs. Conventional valve train limitations subject to valve float and spring tension.

More usable horsepower and torque improving power to weight ratio. Increased energy efficiency and improved fuel economy, an improved engine throttle response provides quick r.p.m's, and engine vibration is reduced. Unobstructed intake and

Art Unit: 3747

exhaust port openings provide improved air/fuel flow to combustion chambers and increased exhaust flow performance. A higher air/fuel intake and exhaust volumes are possible with unrestrictive port openings.

Claims 1-15 are rejected as failing to define the invention in the manner required by 35 U.S.C. 112, second paragraph.

The claim(s) are narrative in form and replete with indefinite and functional or operational language. The structure which goes to make up the device must be clearly and positively specified. The structure must be organized and correlated in such a manner as to present a complete operative device. The claim(s) must be in one sentence form only. Note the format of the claims in the patent(s) cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason Benton whose telephone number is (571) 272-4838. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Henry Yuen can be reached on (571) 272-4856. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Application/Control Number: 10/707,783 Page 8

Art Unit: 3747

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JB

Henry C. Yuen Supervisory Patent Examiner Group 3700